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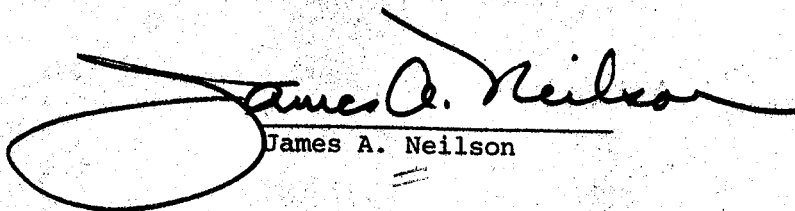
Luther Burbank's Experimental Farm
at
Sebastopol, California



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NEILSON, JAMES A. 03/08/85
MASTER PLAN FOR THE SEBASTOPOL CA
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Submitted:

December 1975


James A. Neilson

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TABLE OF CONTENTS

	Page
PROLOGUE	iv
PART I	
I. <u>THEME</u>	1
II. <u>THE PHYSICAL CHARACTERISTICS OF THE FARM</u>	1
III. <u>THE LAND USE PLAN</u>	4
A. THE CONCEPT	4
B. LIMITATIONS AND CONSTRAINTS.	7
C. THE PLAN LAYOUT.	7
D. PLAN DETAILS BY AREAS	7
1. <u>Passive Areas</u>	7
2. <u>Headquarters Activity Area - I</u>	9
3. <u>Service and Maintenance Area - II.</u>	10
4. <u>The Burbank Memorial Horticultural Exhibit</u> <u>Area - III</u>	10
5. <u>Propagation or Special Use Area - IV</u>	10
6. <u>Propagation or Special Use Area - V</u>	11
7. <u>Parking</u>	11
IV. <u>FARM DEVELOPMENT</u>	11
A. MANAGEMENT	11
1. <u>The Board of Directors</u>	12
2. <u>The Farm Director.</u>	15
B. THE PHYSICAL DEVELOPMENT PHASE	15
1. <u>Security Fence</u>	16
2. <u>Restoration of Burbank's House</u>	16
3. <u>Existing Trees and Shrubs.</u>	16
4. <u>Main Walks and Service Lanes</u>	17
5. <u>Irrigation System</u>	17
6. <u>Service Complex</u>	20
7. <u>The Headhouse Area</u>	20
8. <u>The Greenhouse Area</u>	20
9. <u>The Lathhouse</u>	22
10. <u>The Instructional Units</u>	22



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	Page
11. <u>The Burbank Memorial Walk</u>	23
12. <u>Parking</u>	23
C. THE PROGRAM DEVELOPMENT PHASE	26
<u>Elementary School Use Alternative.</u>	27
<u>Secondary School Use Alternative</u>	27
<u>College and/or University Alternative</u>	28
<u>Therapeutics</u>	28
<u>The General Public</u>	29
<u>Specialized Horticulture Groups</u>	29
<u>The Retirement Center.</u>	30
<u>The Historical Alternative</u>	30
PART II - SPECIAL TOPICS	
1) Therapy and Rehabilitation through Horticulture	31
2) Development of Fiscal Support	32
<u>Annual Plant Sale</u>	33
<u>Produce Sales</u>	34
<u>Contract Revenue</u>	35
APPENDIX A. A Tentative List of Plant Variety Proposed for Planting along the Burbank Memorial Walk	36
APPENDIX B. A List of Plants Growing on the Proposed Farm	
APPENDIX C. A Map showing the Location of Woody Plants Growing on the Proposed Farm (inside back cover) . . .	



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PROLOGUE

This report and master plan have been carried out under a cooperative grant from the National Endowment for the Arts and the City of Sebastapol. The work was done by ECOVIEW Environmental Consultants, principally Dr. James A. Neilson and Dr. W. James Barry. The grant had a tenure of one year and there were three contractual obligations: 1) Preparation of land use and theme alternatives, 2) Development of a Master Plan, 3) Direct the removal of weed and tree overgrowth.

The initial draft of the land use potential and theme alternatives was submitted to the City Manager in June 1975. Using this document as a guide, the attached master plan was developed.

The procedure followed was:

- 1) An ongoing survey of plants within the area was initiated to map, identify, and evaluate the existing woody plants remaining on the property. There are several specimens that still have not been clearly identified because no fruit was formed, especially on several dwarf prunes. The precise location of remaining woody plants are indicated on the location map found inside the back cover. This map should supersede previous maps published in the Environmental Impact Report prepared by us for the Retirement Center and other locally published maps.
- 2) With the help of city employees, the removal of most of the weedy overgrowth was accomplished by late August. This work was done under the personal direction of Dr. Neilson. The species removed were scotch and french broom, some of the blackberries and loganberries, coyote bush, seedling locusts, and one service tree. In this process several seedling specimens, a garden of blueberries and several hawthorn were uncovered. During the cleanup process, a random sample of 25 loganberry roots, and 15 blueberries were potted and removed to a nursery under the care of Dr. Neilson. For evaluation purposes 30 cuttings each of all remaining roses were taken and rooted during the fall of 1975. These are also under Dr. Neilson's care. All materials unidentified or in doubt were carefully preserved.
- 3) Late in the fall, Mr. Robert Cowen, a noted nurseryman and horticulturist of Walnut Creek, evaluated the condition and value of shrubs and trees on the property. Agreement was reached and the treatment of trees and shrubs remaining. It is clear that if some apples and prunes are to be salvaged new root stalks should be obtained and budded over from the older trees. Subsequently, the older trees should be removed and the sites treated for disease.



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LIST OF ILLUSTRATIONS

Figure	Page
1. The Layout of Burbank's Original Experimental Farm	2
2. Land Use in the Vicinity of the Restored Farm	3
3. Layout of the Burbank Heights Retirement Community and the General Aspects of the Proposed Master Plan	5
4. Active and Passive Use Areas	6
5. The Distribution of Activity and Service Areas	8
6. Management Organization Chart.	13
7. Road Layout and Trees to be Removed.	18
8. Water supply system.	19
9. Layout of Proposed Buildings	21
10. Proposed Tree Planting Areas along the Memorial Walk . . .	24
11. Proposed Parking Areas	25



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ECOVUE has provided the city with copies of several 2x2 colored slides of the Farm and the work in progress during 1975. ECOVIEW will continue to act in a consultant's capacity until directed otherwise by the City Manager of Sebastapol.



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LUTHER BURBANK'S EXPERIMENTAL FARM

FINAL REPORT - PART I

I. THEME

Burbank's own work should be emphasized in the theme of the "Farm." To reflect this theme, the Farm could, if fully developed, perform several functions: (1) a repository for the perpetuation of plant materials developed by Burbank, (2) a public display of Burbank's plant materials, an illustration of his techniques, and a demonstration of selected important concepts in modern plant breeding and biology, (3) a center for local horticultural activities, and (4) an educational and service center for selected or special purposes.

The Farm should be a functional and productive unit, operated at least on a partially self-sustaining basis. It should reflect Burbank and his contributions. The special use areas conceived in the land use plan should reincarnate, at least in a small way, the rows of cultivars that characterized the original appearance of the Farm. Some of these could perhaps be sold to the public as mementos as part of the self-sustaining effort.

II. THE PHYSICAL CHARACTERISTICS OF THE FARM

The Farm designate comprises approximately 5 acres of land, including the north and a portion of the west central sections of the original landholding (see Figure 1). This map was reproduced from a copy from Burbank's own Journal of 1916.

Figure 2 shows the general relationship of the Farm designate to neighboring areas. Bodega Highway (State Route 12) is a well-travelled thoroughfare leading from central Sebastopol to the coast. The north-west section (Figure 1) is now part of the cemetery to the west of the proposed farm restoration. The Burbank Heights Retirement Community, a federally supported senior citizen housing development, was completed in 1974 in the northeast, east, south and part of the west central sections of the original farm. The access road to the Retirement Center is now the sole access to the proposed development, the original entrance being too dangerous to use as access for general use.

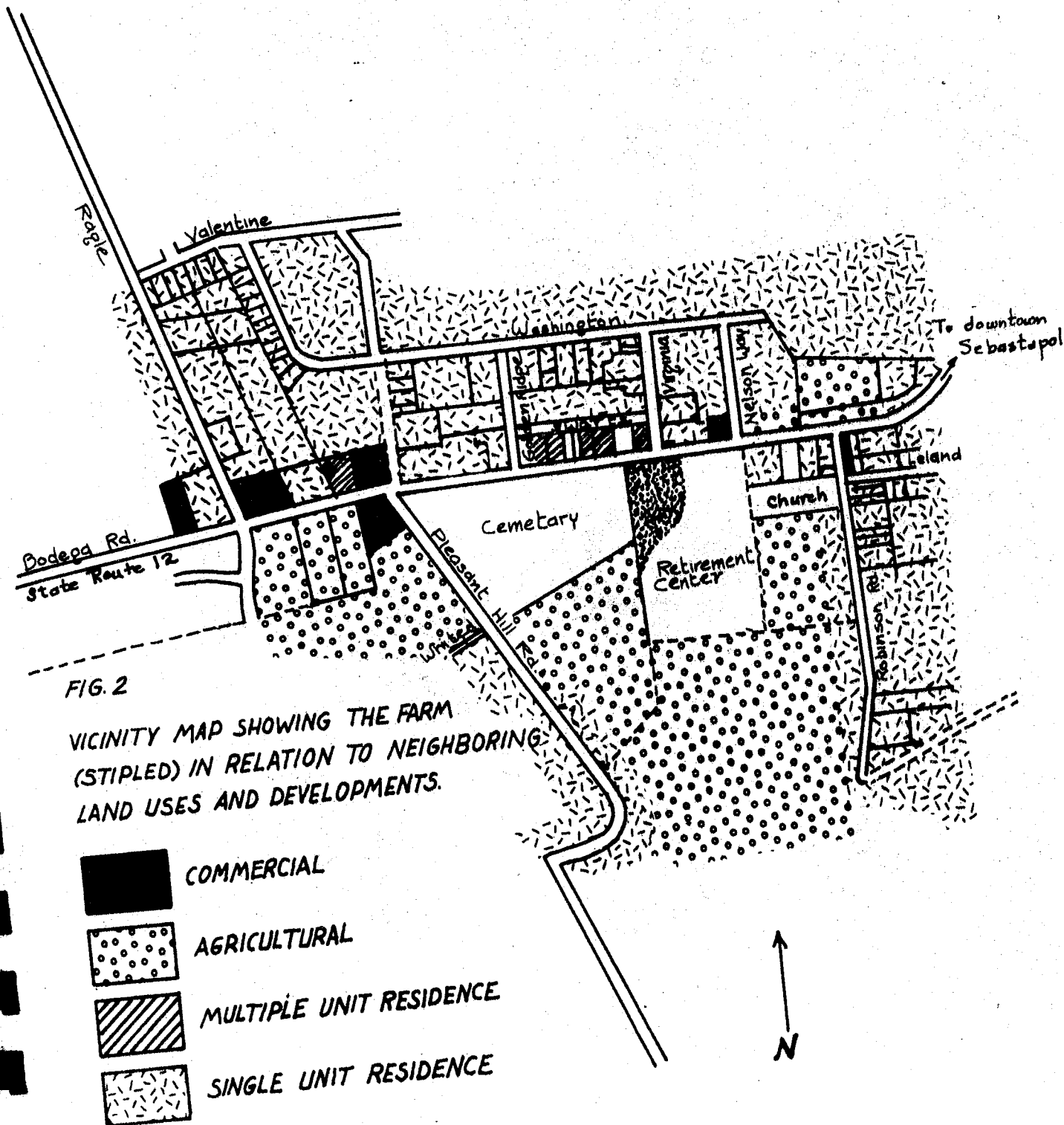


Figure 3 shows the general details of the proposed farm restoration project and the master plan of the Retirement Center. Within the confines of the farm project* the land is gently rolling with elevation differences amounting to 24 feet.

A steep road cut forming a sheer bank 12 ft. high distinguishes the north boundary along Bodega Highway. The west property line borders the city cemetery. The south and east boundary consists of the original dirt access road and the newly constructed paved road serving the Retirement Center. A number of trees and shrubs remaining from Burbank's plantings or from native growth exist on the property. At the start of the project much of the former experimental area was overgrown with scotch broom and berry vines; these were carefully removed during the project year.

The house used by Burbank on the property remains, but has been abandoned and is in a state of neglect and serious deterioration. It has been recently boarded up by the city of Sebastopol to prevent further vandalism and undue deterioration.

III. THE LAND USE PLAN

A. THE CONCEPT

The conception of the land use plan embodies active and passive areas which can be expanded or contracted as appears appropriate from the intensity of public interest, the rate and magnitude of monetary support, and the continuity and direction of management. Active areas include management, control and service areas; meeting rooms and gardens; the Burbank Memorial walk; and propagation and plant culture demonstration areas. Passive areas include background planting, access and movement control plantings, and latent activity areas. Figure 4 delineates the approximate boundaries of proposed active and passive areas.

* In the discussions that follow, "the Farm" refers to the restoration project as conceived herein. "The Original Farm" will refer to the area shown in Figure 1.



RETIREMENT CENTER

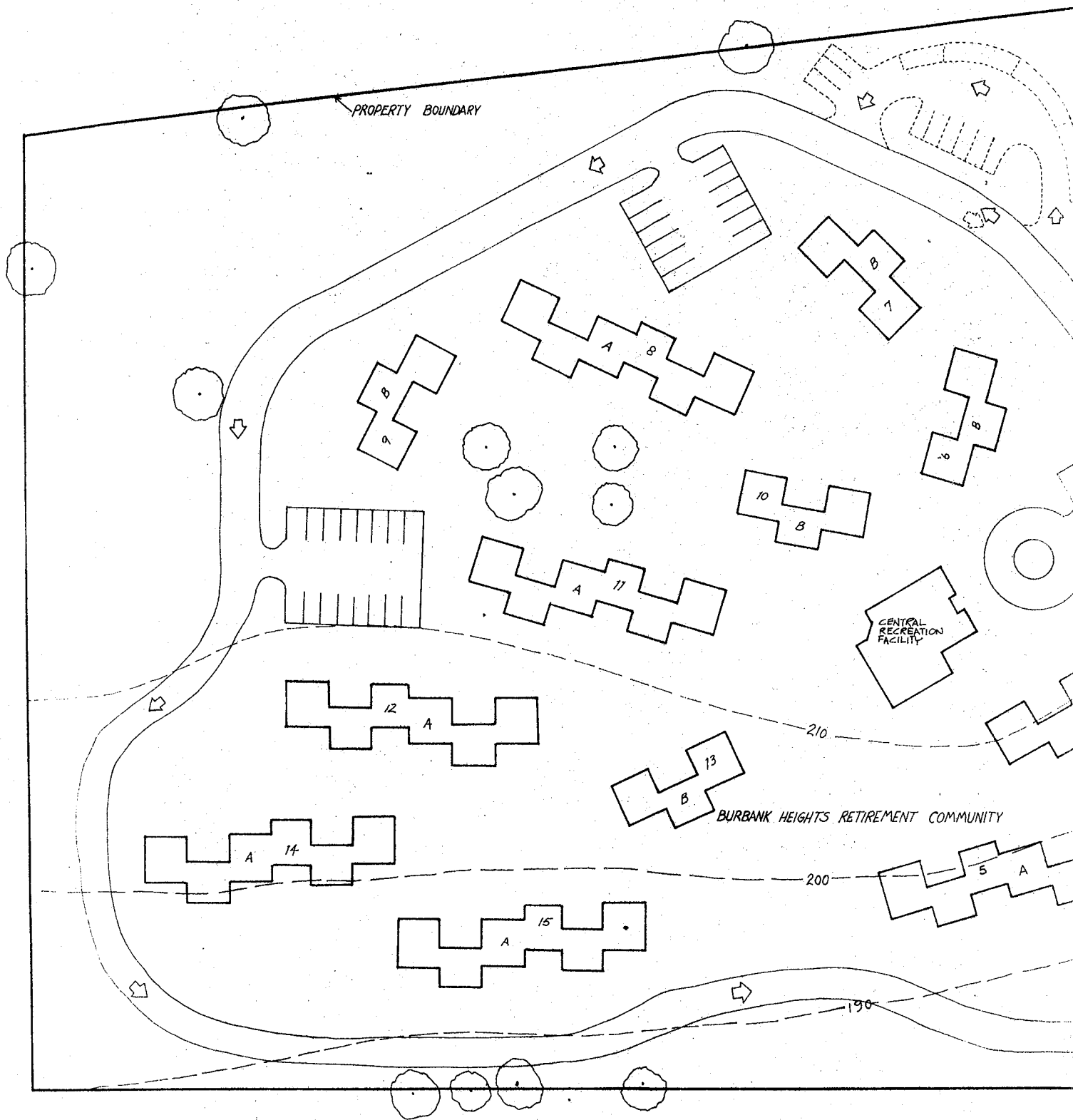


FIG. III.

BURBANK FARM AND RETIREMENT COMMUNITY

LEGEND FOR FIGURE III.

DOTTED LINES = PROPOSED IMPROVEMENTS FOR
BURBANK FARMS

SOLID LINES = EXISTING ROADS AND STRUCTURES

SOLID ARROWS = EXISTING TRAFFIC PATTERN

DOTTED ARROWS = SUGGESTED TRAFFIC PATTERN

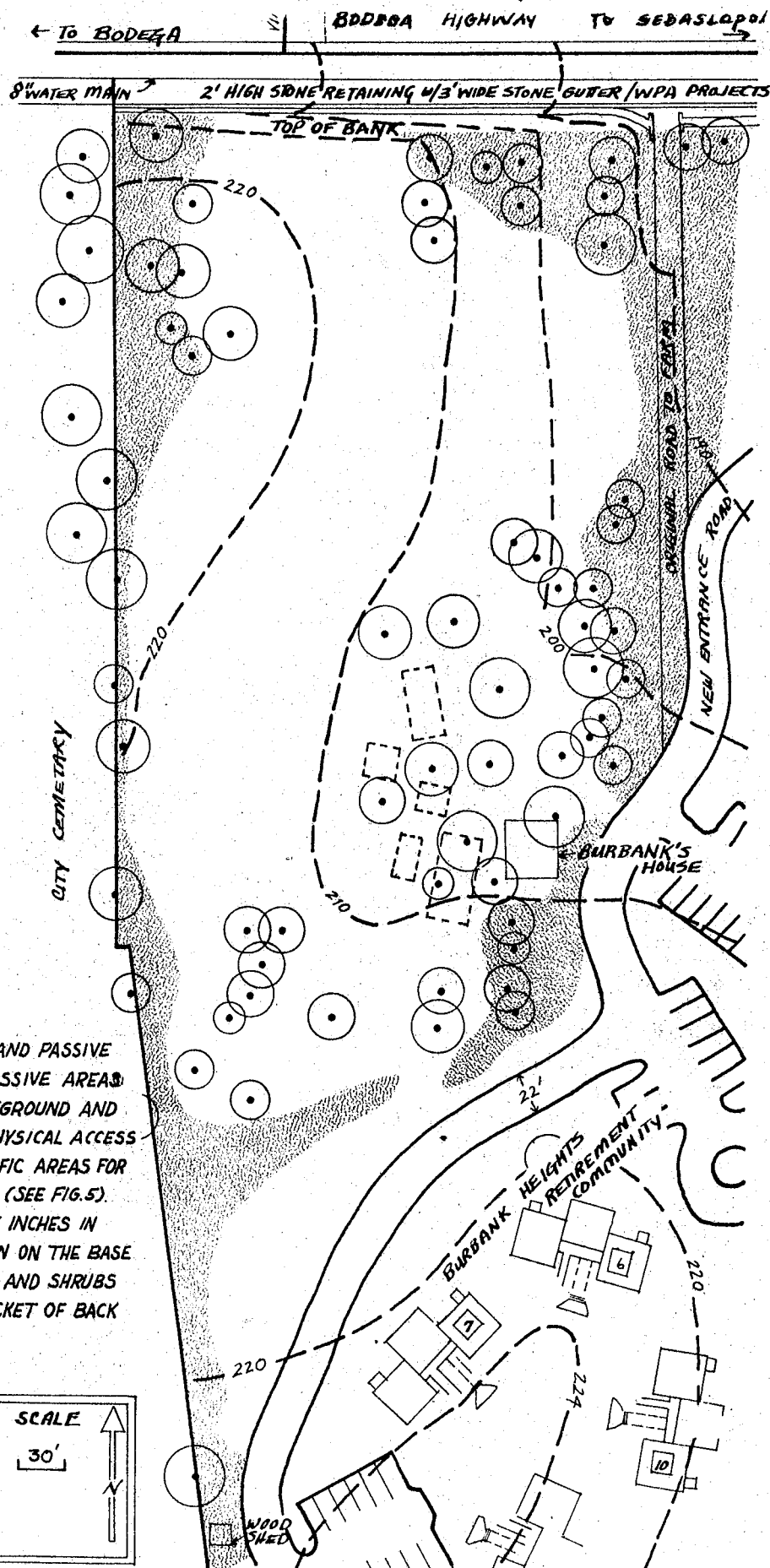
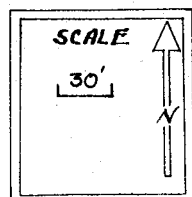


FIG. 4

ACTIVE (UNSHADED) AND PASSIVE (SHADED) AREAS. PASSIVE AREAS ARE USED FOR BACKGROUND AND ACCESS CONTROL. PHYSICAL ACCESS IS LIMITED TO SPECIFIC AREAS FOR SELECTED PURPOSES (SEE FIG. 5). ONLY TREES OVER SIX INCHES IN DIAMETER ARE SHOWN ON THE BASE MAP. FOR ALL TREES AND SHRUBS SEE LARGE MAP IN POCKET OF BACK COVER.



3. Service and Maintenance Area - II

This area comprises a head house, equipment storage shed, a small greenhouse and/or a lathhouse. This area should be fenced in and access permitted to authorized personnel only.

This central area is connected to maintenance paths which service all other areas. Maintenance paths should be wide enough to accommodate a pickup or small truck and small power equipment necessary for tillage or other maintenance operations (see Figure 4).

4. The Burbank Memorial Horticultural Exhibit Area - III

This element is the most important part of the public attraction. It is designed to accommodate about 30 tree species and examples of other herbs and shrubs as may be expedient. It will encompass examples of existing native and planted trees remaining from Burbank's planting, although it must be remembered that nearly all materials extant on the site today have little but sentimental value. Details of these proposed plantings are given later in this report. Suffice it to say here that the maintenance of these plant materials will require periodic spraying, harvesting, pruning, and replacement. It must be realized at the outset, that the successful execution of this project requires constant and long range commitment by the city, and, to some extent, the county.

The function of this unit is to (a) provide a permanent repository of graft wood or clonal material representing most if not all of Burbank's significant contributions; (b) illustrate methods used by Burbank in grafting, mutation, hybridization, recombination, mass selection, and clonal multiplication; (c) illustrate modern methods of plant propagation and plant genetics where convenient and appropriate. This unit can also serve as an educational and instructional tool for other aspects of biology as well as an aesthetic element of the Farm.

5. Propagation or Special Use Area - IV

The function of this area is somewhat flexible, but is conceived as an area for raising plants, especially those requiring partial shade. It can be used for plant propagation, special projects by schools or special interest groups, research, display, or for the development of collections of selected species and their horticultural variations.



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a recognized botanist, plant geneticist or plant breeder, and two members at large from the community. A basic prerequisite for membership on the board should be a continuing interest in Burbank and his work, as well as public stature and political acumen which can aid in acquiring public support. Ex officio (non-voting) members might include: the U.C. Extension horticulturist, a representative of the Department of Biology from Sonoma State, the County Agricultural Commissioner, or other county representative, as may be deemed necessary.

The role of the Board of Directors should include:

1. To set goals and objectives.
2. Setting policy and direction to the development and operation of the Farm.
3. To assist the City Manager in acquiring public and agency fiscal support.
4. To select and appoint a Farm Director.
5. To review and approve the budget.
6. Periodically review progress and assess program effectiveness.
7. Establish and expedite a continuing program to generate public interest and support.

It is recommended that Board of Director membership be considered a working responsibility and not an honorarium. Persons selected for this responsibility need to bring recognized expertise or talent to expedite one or more of the functions of the Board of Directors. The City Manager should provide the continuity on the board and chair the meetings. The City Council should appoint board members upon the recommendation of the City Manager and consultants of his choice--perhaps ex officio members of the board. Tenure should be at least 5 years.

It will be of utmost importance to establish an ongoing public relations program with the following objectives: 1) fiscal support, 2) acquisition of volunteer or contributed labor and expertise, 3) identification, acquisition, and maintenance of plant materials and 4) program development responsive to public need and capability of the physical plant.

It is strongly urged that this public relations function be a joint effort by the Board of Directors and the Farm Director. The assignment and delegation of specific roles needs to be clearly identified, and be consistent with the capabilities and personality of the persons involved.



2. The Farm Director

Ideally, the Farm Director should have strong capabilities in horticulture or botany and public relations. A Bachelor's Degree from a recognized institution or its equivalent in horticultural or botanical experience should be required. Background or experience in outdoor or natural science education would be valuable. It would be important to have a person who would expect to work in the position for at least five years in order to achieve continuity of the basic objectives of the development program.

The Farm Director's responsibilities range widely and are divided between the physical and program development phases. Initially, the physical development aspects would be emphasized in order to provide a place and setting for the initial program elements. Hence, plantings and physical development may be under his direct supervision or in conjunction with a consultant retained for that purpose.

Nevertheless elements of the public relations program need to be started at an early date and need to keep pace and be expanded according to fiscal need and the acquisition of facilities.

His duties would include acquisition and supervision of volunteer help, liaison and reports to the City Manager, preparation of a monthly or quarterly report.

Subordinate personnel will not be discussed in this report because 1) the number and type will depend largely on the program and activities selected for the Farm, 2) the type and extent of input from city agencies is not yet clear, and 3) the amount and dependability of volunteer labor cannot now be estimated. As those suggested programs, discussed subsequently, are approved, it will be fairly obvious what personnel and agencies may become involved.

B. THE PHYSICAL DEVELOPMENT PHASE

Those actions which need to be undertaken more or less in order of their priority are: (1) construction of a security fence; (2) restoration of the house; (3) restoration of existing trees and shrubs and removal of those that are superfluous, or beyond salvage; (4) the laying out and construction of main walks and service lanes, (5) the installation of an irrigation system, (6) the construction of a head house and equipment shed; (7) the planting of plant materials as they become available; (8) the construction of greenhouses, display areas and lathhouse; (9) installation of instructional and aesthetic elements; and (10) the installation of parking facilities.

1. Security Fence

It has become increasingly apparent during the preceding two years that a security fence is necessary to protect the property from vandalism, improve security and facilitate regulation of access. It will undoubtedly become important as the fruit and plants propagated become valuable and abundant, especially so, if any effort towards partial self-sufficiency is to be realized. A cyclone fence 5 to 6 feet high is appropriate on the west, north, and part of the east edge of the Farm. It may be more aesthetically appropriate to construct a fence of a different type in keeping with the architectural theme of the proposed buildings and to include natural barriers such as florabunda roses, etc., of sufficient size to impede or deter access except through control points.

2. Restoration of Burbank's House

It is of considerable importance to restore the house on the property as soon as possible. Delay will result in considerable damage to the floor and its supports which may in turn further damage sills and wall studs. An architect should be engaged to supervise the restoration. However, we strongly urge that the original architecture, or a possible improvement, using the style common to the turn of the century or its first two decades, be utilized in this and any other structure constructed for the Farm.

This building should be used initially for staff headquarters and as a public service center for the Farm. Its interior should be adapted for future use as a Burbank Museum and to house some of his memorabilia if such can be acquired.

3. Existing Trees and Shrubs

Continued work on rejuvenation of trees and shrubs should occur as soon as possible under the guidance of a consultant retained for the purpose. Several small trees and a few shrubs should be transplanted to more favorable sites. Some may be useful in the landscaping of the entrance area to the Burbank Heights Retirement Center.

After considerable study and consultation, we recommend that the large eucalyptus tree be entirely removed. Its location is not compatible with the land use plan as here proposed; it is a hazard to the focus center where visitors will congregate, and it requires considerable maintenance. It also casts considerable shade over a large area which is not in keeping

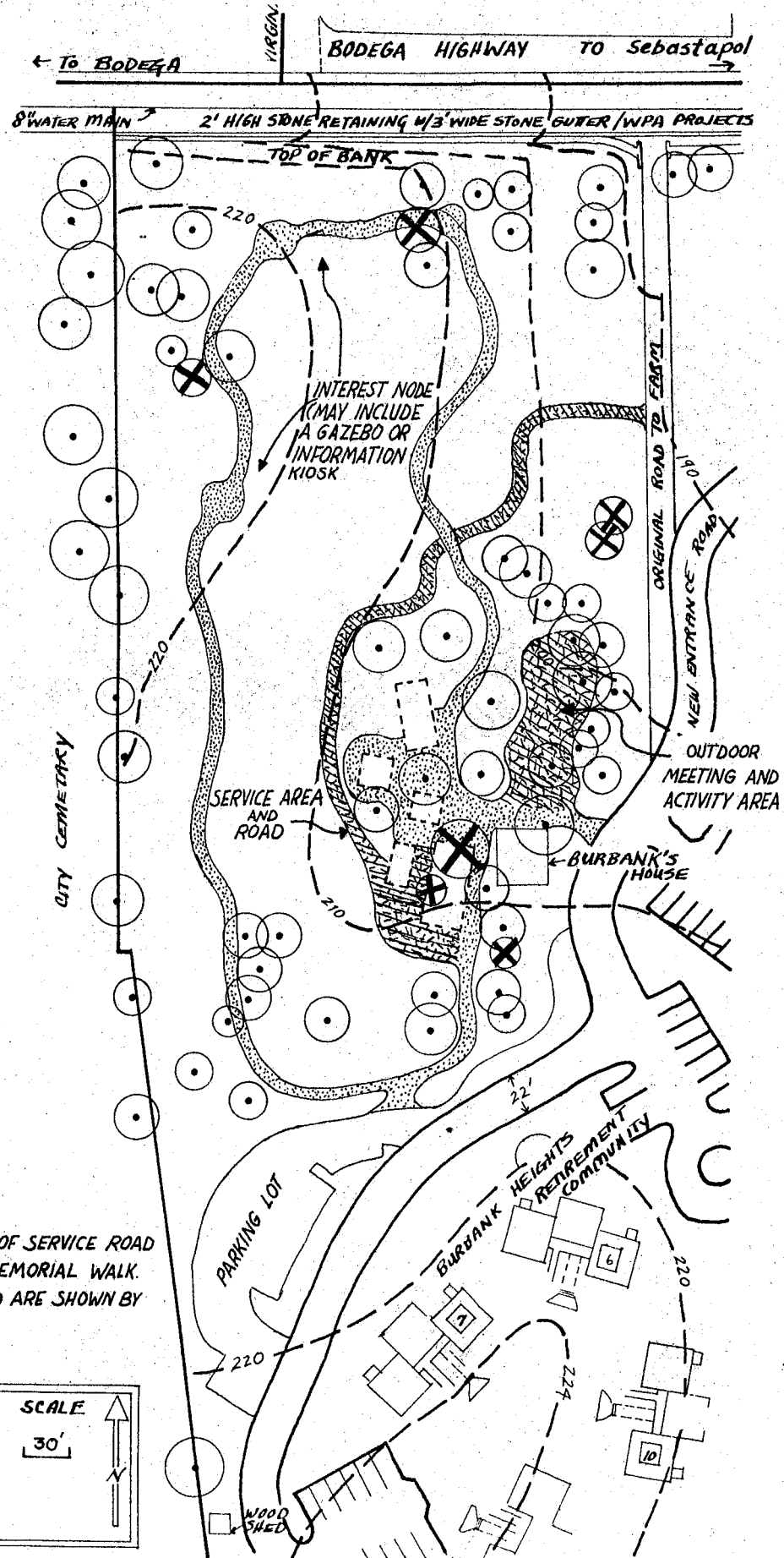


FIG. 7

THE GENERAL LAYOUT OF SERVICE ROAD AND THE BURBANK MEMORIAL WALK. TREES TO BE REMOVED ARE SHOWN BY THE SYMBOL ⊗

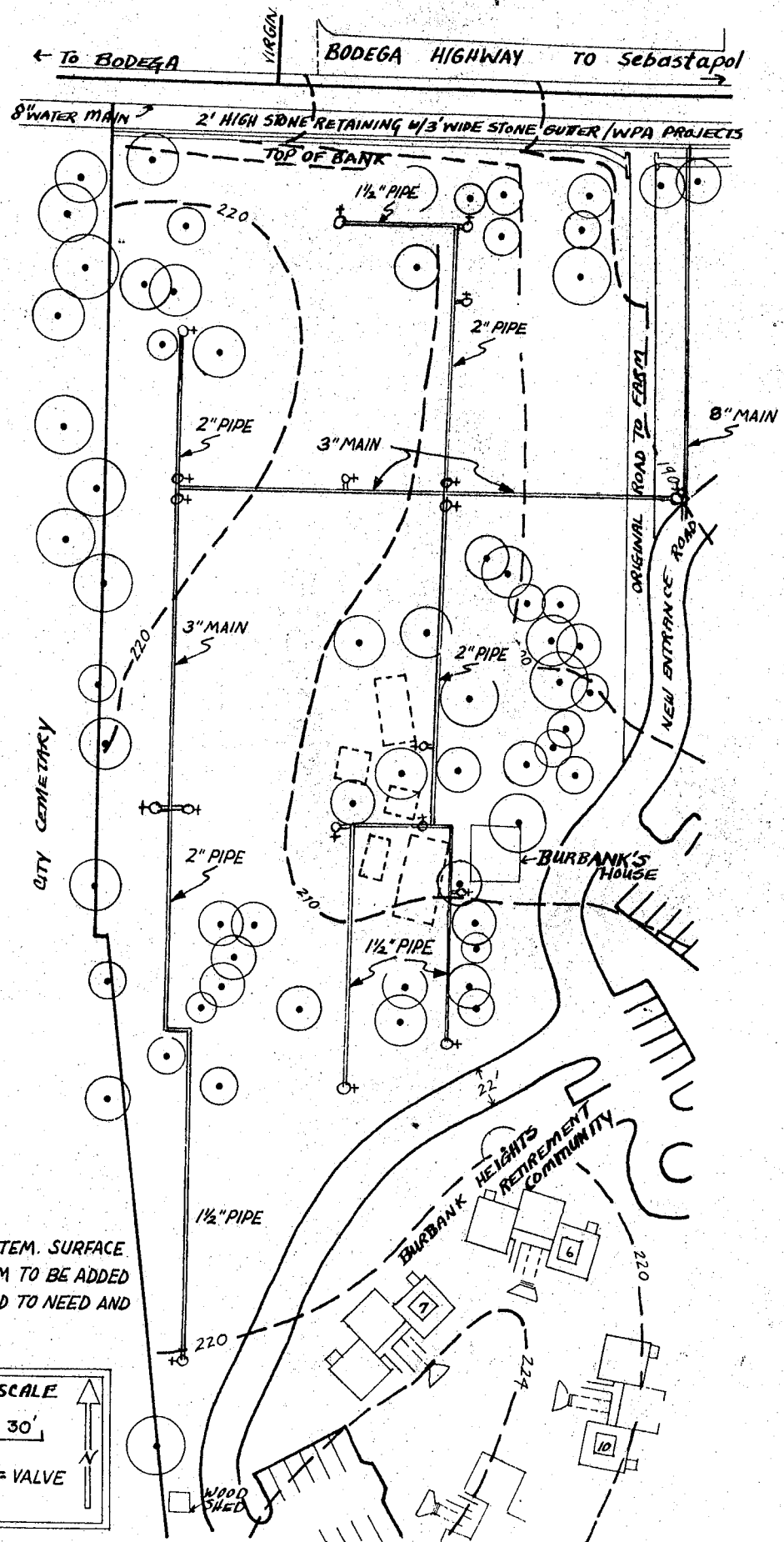
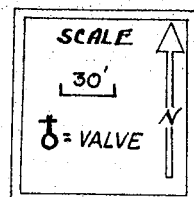


FIG. 8

WATER SUPPLY SYSTEM. SURFACE
IRRIGATION SYSTEM TO BE ADDED
LATER AND ADAPTED TO NEED AND
PLANT TYPE.



The basic distribution system is placed so that trenching disturbs as few root systems of existing large trees as possible. The main supply is the existing 8" main that parallels the old entrance road about 30 feet to the east. A separate valve may be installed at the same time to irrigate the adjoining entrance grounds of the Retirement Center.

6. Service Complex

A tentative plan for the arrangement and space requirements are shown in Figure 9. We urge the following design features:

- (1) The service area should be screened from general view from the Burbank Walk and from the education and display center.
- (2) It should have a fence and small yard to accommodate equipment. A minimum size should be 600 sq. ft. for this unit.
- (3) Its access is to be primarily on foot but include a connection to the parking lot and the main access route.
- (4) It should include a small work bench, storage for tools and equipment including small garden tillers, spray rig, etc. A minimum size should be 400 sq. ft. for this unit.

7. The Headhouse Area

It should provide facilities for washing pots, a potting bench, soil bins, seed, chemical and equipment storage, soil mixing and possibly soil sterilization. It should be adjacent to and connected with the greenhouse and service yard and proximal to the lathhouse with a connecting door to the educational and display center. This unit should have heating and good lighting. A minimum size for this unit should be 400 sq. ft.

8. The Greenhouse Area

This unit should be relatively small, utilized for plant propagation only. The basic design should follow closely that built for the Department of Environmental Horticulture at the University of California, Davis. It does not need to be elaborate but should include facilities for mist control, heat cables for soil temperature control. Heat and light are imperative. It should be easy to keep clean and disinfected. Optimal size for this unit is about 350 sq. ft.

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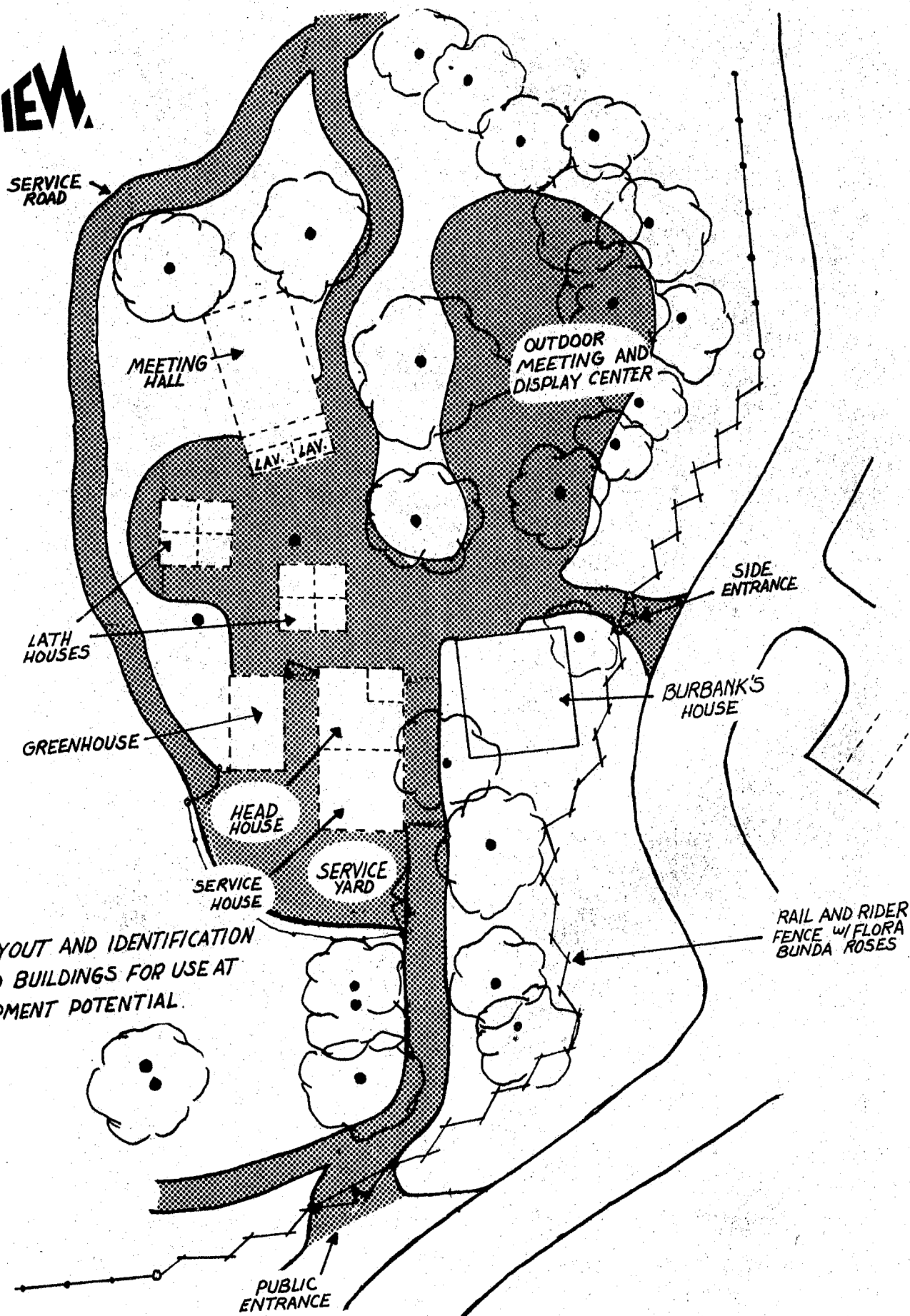


FIG. 9

GENERAL LAYOUT AND IDENTIFICATION
OF PROPOSED BUILDINGS FOR USE AT
FULL DEVELOPMENT POTENTIAL.

9. The Lathhouse

This unit is designed for multiple use, i.e., propagation, maintenance for plant sales and for displays. It is therefore oriented towards the educational center. It is conceived as several 10 x 10 foot sections, each with facilities for automatic watering control on reduced water pressure suitable for an individual pot drip watering system.

10. The Instructional Units

Contiguous with the complex suggested above, a meeting room with a seating capacity of about 65 should eventually be considered. It should have a capability for audio-visual use, a sink, a display table (possibly all along one wall and some cupboard storage. This unit should have a minimum space of 800 sq. ft. While this unit is conceived for all-weather use, the most important adjunct to the educational use is the arboreal shelter directly north of the house. The development of this area requires:

- a. that most of the lilics and quinces be transplanted,
- b. that all of the seedling locusts and prunes be removed,
- c. that the undergrowth be removed, the ground leveled and gravelled, a rocked waterway be constructed to control excess water drainage in the bottom of the swale, benches, etc., be constructed,
- d. a portion should remain open for possible use for plant or fruit sales,
- e. the area should remain well screened from the east and west by plantings of evergreen shrubs.

Lavatory facilities capable of serving the whole complex should be installed for outside and inside access. Space for static educational display areas should also be provided along the building in small 4 x 6 ft. booths. They should be covered, sheltered from winds and rain, equipped with lights and electricity and oriented along the main path.

Short side paths off the main walk should feature special plants or displays. Interest nodes along the main walk should have increased space for gathering of parties convenient to the guide or group leader. Benches, arbors, possibly sculpture, memorabilia, honoraria, etc., may be considered at various places as long as it is consistent with the theme and decor of the Farm.

11. The Burbank Memorial Walk

The installation of the plantings along this walk should occur as soon as an irrigation system and materials can be acquired. Figure 10 suggests the tree spacing, grouping and general layout. As many of the existing trees are to remain as is appropriate to the concept of the walk. Side paths can be constructed later as interest and materials present themselves. A tentative list of plant materials is compiled in Appendix I. Their acquisition depends on availability, propagation, and whether or not certain selections have survived.

As long as it is practical, the departure from normal orchard practice of clean cultivation under trees is not particularly appropriate for this walk. As long as disease and nutrition problems do not arise from permanent ground cover plantings, clean cultivation is not recommended. However, to be successful, all fruit must be picked and removed from the premises. None must be allowed to drop from the trees and rot on the ground. If properly done, prunings, leaves, excess fruit may be composted and later spread on open ground or as mulch under trees, but careful precautions must be taken to control disease and insect pests. An appropriate program for each group of trees to control pests must be followed if the collected specimens are to survive. Several of Burbank's selections were rather susceptible to disease, especially bacterial gumosis and crown gall.

Undeveloped sections of the walk and adjacent grounds can be (1) kept clean by cultivation, (2) sown to perennial sweet peas, (3) sodded, or (4) planted to appropriate ground cover. Clean cultivation tends to promote soil erosion in these loose sandy soils. Therefore, precautions should be taken to control soil movement by furrowing, mulching, or cover cropping during the rainy season.

12. Parking

This element is probably the greatest challenge to planning of all. In order to reduce traffic and disturbance to the Retirement Center, we recommend that the road be widened to accommodate two-way traffic to the end of the proposed lot (see Figure 11) and the entire area shown developed as a parking lot to accommodate buses and cars. The general design shown should be critically reviewed by an engineer to insure proper turning radii and maximum use of available space.

This unit is probably the most limiting factor for the realization of full potential use of the Farm's capabilities. An alternate plan is also shown in Figure 3 to increase slightly the parking potential. In any case adequate signing and restrictions must be made so that privacy of the Retirement Center is maintained.

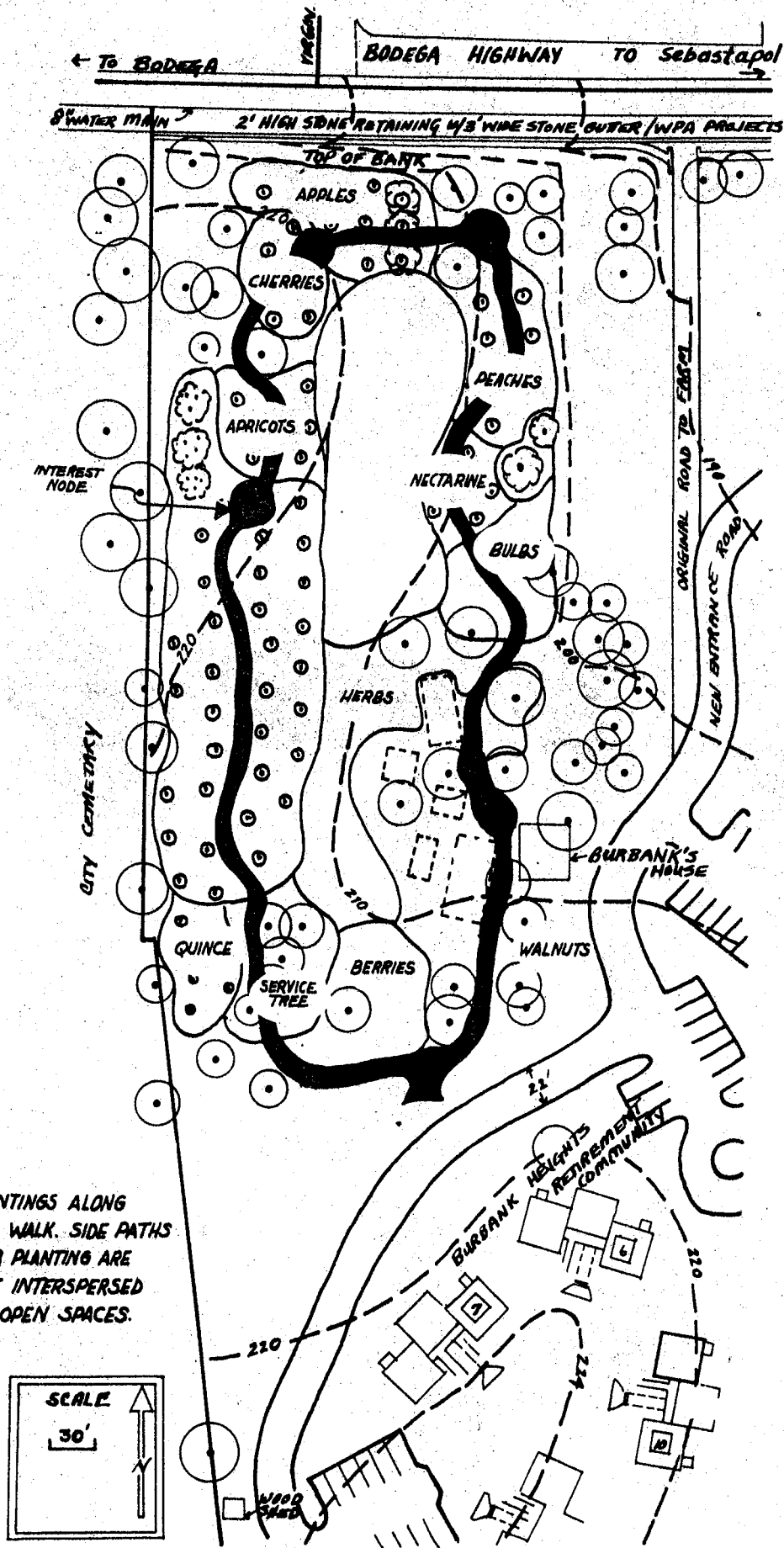


FIG. 10

PROPOSED TREE PLANTINGS ALONG BURBANK MEMORIAL WALK. SIDE PATHS AND HERB OR SHRUB PLANTING ARE NOT SHOWN BUT ARE INTERSPERSED UNDER TREES OR IN OPEN SPACES.

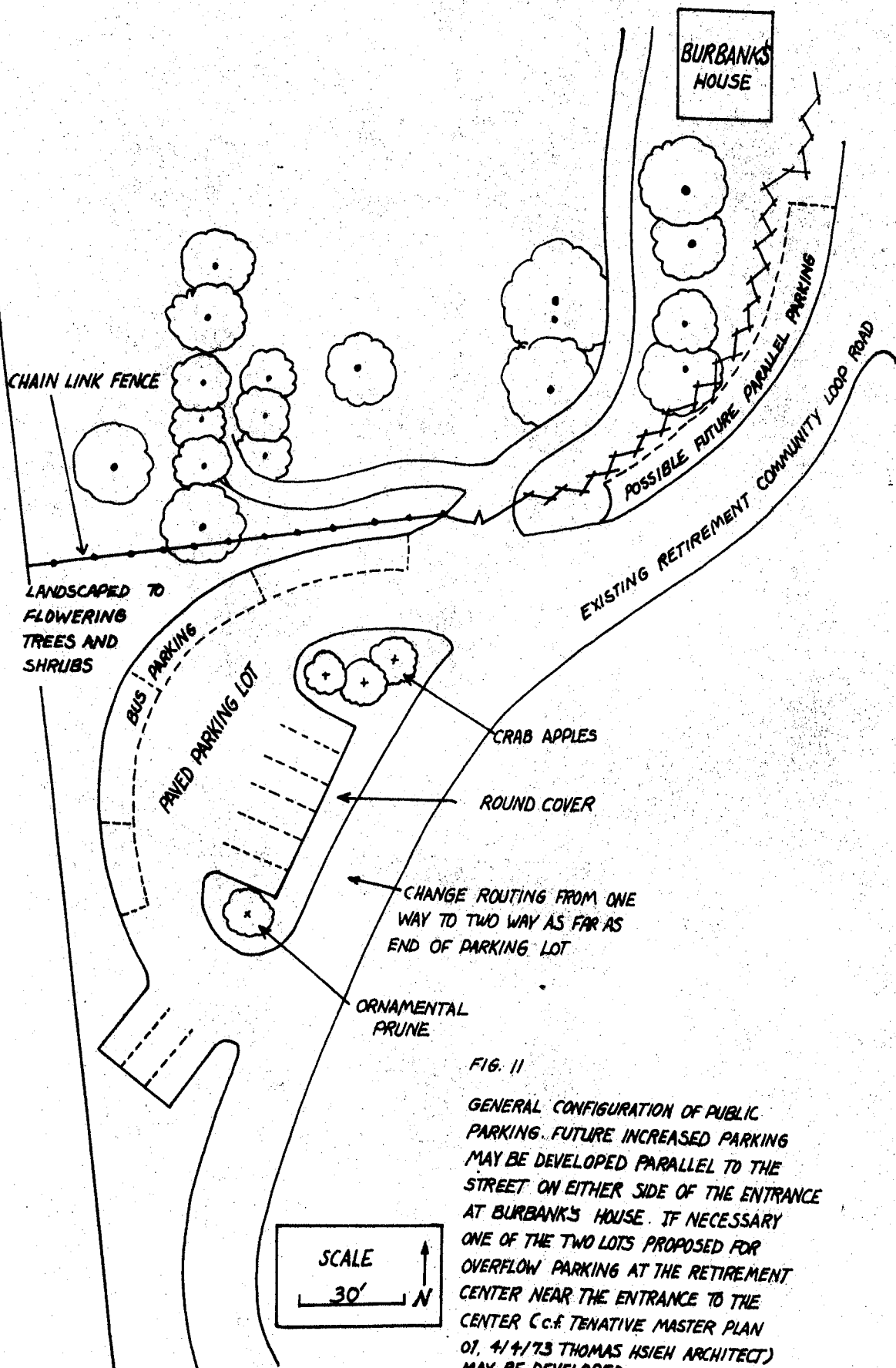


FIG. 11

GENERAL CONFIGURATION OF PUBLIC PARKING. FUTURE INCREASED PARKING MAY BE DEVELOPED PARALLEL TO THE STREET ON EITHER SIDE OF THE ENTRANCE AT BURBANK'S HOUSE. IF NECESSARY ONE OF THE TWO LOTS PROPOSED FOR OVERFLOW PARKING AT THE RETIREMENT CENTER NEAR THE ENTRANCE TO THE CENTER C.C.F. TENTATIVE MASTER PLAN 01, 4/4/73 THOMAS HSIEH ARCHITECT) MAY BE DEVELOPED.

C. THE PROGRAM DEVELOPMENT PHASE

There are several alternative uses possible at the Farm and others may develop as the opportunity arises.

Those discussed here are as follows:

1. A repository of Burbank's material for public display.
2. A site for elementary school education in general and applied plant biology.
3. A site for secondary school education in propagation techniques and plant biology.
4. A site for college and university participation in
 - a. outdoor education practice and experimentation,
 - b. research or training in plant breeding and genetics,
 - c. training in use of horticulture as a therapeutic tool for the disabled.
5. A site and facility for use of horticulture as a therapeutic tool for various kinds of disabled persons.
6. A center for the promotion of horticultural activities, particularly those supporting the Farm.
7. A small experiment station for varietal testing or research.
8. A center for the collection and display of selected horticultural species, such as dahlias, roses, iris, bulbs, etc.

For each use selected, one or more key persons must also be selected and adequate facilities and support for the use must be provided. Such use must be approved by the Board of Directors and they should be responsible for assuring long term support both from managerial and fiscal aspects. The Farm Director should also be in support of the use and be responsible for the condition of the facilities, liaison between using groups, regulating extent and conditions of use, aiding in the acquisition of fiscal and personnel support. It is not recommended to begin all alternative uses at once, but that those compatible with facility, personnel available and the rate of input of public support and interest for a particular use be selected. All alternative uses, including suggestions from other sources, should be brought to the attention of the Board of Directors and the decision for inclusion into the program master plan and its temporal and special inception requirements identified.

Initially a program of display and use of plant materials is essential to the realization of other alternative uses and may dictate to considerable degree the order of physical plant construction.

In the Table of Organization (Figure 6) we have identified a committee on acquisitions. The diligence and effectiveness of this committee will dictate the speed by which the "Memorial Walk" can become effective as a display and educational element. It may well require that certain desirable varieties must be purchased. In many cases it will require that bud or graft wood be acquired and grafted to appropriate root stock and grown out at the Farm. Hence, the full development of the walk may take as long as five years to complete.

It will do no good to have the material on display without a guided tour or self-explanatory information to accompany the specimens. Ultimately, the guided tour is most valuable to the visitor because of the interchange of information and the solicitation of assistance to appropriate audiences. However, a printed sheet correlated to a numbering system, indicating the interesting facets of each variety on display is the least expensive and easiest to maintain. Undoubtedly, such public relation materials can be developed through participation of local colleges or groups under alternative use plan 4a.

Elementary School Use Alternative

The Memorial Walk and educational displays are easily and naturally adapted to use by elementary school groups. However, it is essential to develop audial, visual, and tactile background materials, geared to the interest span and conceptual capabilities of the visiting age group. The accompanying instructor of such groups should have the cooperation of the management and staff to carry out the specific activity that prompted the use of the Farm for the group. This is the reason for control and scheduling function of the staff.

As pointed out below high school and/or college students trained or in training for outdoor education may serve as guides or special feature instructors for elementary children.

Secondary School Use Alternative

There are a host of activities that can be devised to interest high school students; for instance, botanical, horticultural, biological and environmental education, training in leading and guiding tour groups, providing assistance to or managing special projects or activities, and individual research or education projects connected with plants. The exploitation of this resource and/or service will depend largely on the

management characteristics of the Farm, the liaison with local schools, and the availability of facilities and financial support available. It will require the active involvement of secondary school educators who come with a proposed program or objective and a willingness to provide sustained interest. Farm staff time and effort should be supportive but only indirectly involved.

College and/or University Alternative

There are several local colleges within a reasonable radius of the Farm that could utilize the Farm's facilities as well as contribute to its ultimate success.

Some elements of the farm could be used for graduate research or special study work, supervised undergraduate special study projects, experience in outdoor education, group therapy or specialized training.

The Farm can also serve as a demonstration area or a special attraction for field trips, etc.

The college and university staff will need to be used by the staff for technical assistance in horticulture and education. Their students should be a continuous source of help as in service trainees in a variety of capacities, i.e., work projects, construction, tutors and instructors, therapists and guides.

Therapeutics

The use of horticulture as a therapeutic resource has considerable value to the community, but must be geared toward identifiable groups that 1) need help, 2) have trained therapists in charge of specific programs, 3) and for which facilities can be developed at the Farm. Such groups might include, but not be limited to the aged, physically handicapped, psychologically handicapped, rehabilitation of distressed persons, and disabled.

Such activities might include: 1) plant propagation, 2) plant maintenance, 3) fruit preservation (canning), 4) flower arranging, 5) physical work, etc. The whole potential of therapeutics requires the availability of highly-skilled supervisory personnel, adequate support personnel, reliable transportation and adaptable facilities and/or scheduling; e.g., it might defeat the purpose of psychological therapy if several groups of small noisy children were visiting at the same time.

The development of this use potential is best routed through the California Chapter of the National Council for Therapy and Rehabilitation through Horticulture* and the applicable medical associations within reach of the Farm. As with each of the other programs suggested, the success of such a use will depend to a great degree on the involvement of one to several key persons in the medical profession who are within physical range of the Farm, and who have the insight to connect need with the means. He or they must also be able to generate interest among members of the various professions in the use of the facility. The proximity of the senior citizen community immediately suggests a potential use of the Farm in the area of geriatrics (see below).

We emphasize again that for each potential use involving therapeutics a somewhat different set of facilities must be made available and programmed to be compatible with other uses.

The General Public

In spite of the problem of parking and access, there should be a strong emphasis on public participation and viewing. It is essential for the success of the restoration effort to generate strong public support, and unless adequate sustained monetary support is forthcoming from other sources, the public's input will be a critical factor supplying continuing fiscal support.

It may well be necessary to limit the numbers of persons visiting at any one time, or to provide public transportation from more remote parking facilities, but in any case, the public must be given access to come at least on certain days of the week. At certain seasons of the year it may be possible to advertise to attract the general public; for instance, at bloom time, and at the height of the harvest season, to generate interest, acquaint the public with the programs and provide a market for produce and plants. Local residents should have access much of the time as long as traffic doesn't interfere with scheduled programs.

Specialized Horticulture Groups

The facilities suggested in the physical plan may well serve the local community as a gathering and activity center for garden clubs and societies. Their participation might include

* The president of this chapter is:

Edward Ortig
1021 South 5th Street
Alhambra, Ca. 91803

the development and care of designated gardens, of special displays, or of collections of species. Other activities might include the responsibility of plant sales, fruit sales, etc., that are described in Part II of this report to provide financial support for the Farm.

The Retirement Center

The inclusion of this entity is prerequisite to the Farm's success. The relationship should be mutual providing a resource for activity and interest, and where necessary for therapy in exchange for time and expertise of the residents in a variety of capacities; e.g., assistance in the office, in sales, in care and maintenance of the Farm or some of its gardens. The exploration of the degree and direction of involvement of the Center's residents has yet to be determined, but it is an important resource that cannot be overlooked.

The Historical Alternative

The development of the Farm can present an opportunity to develop an historical commemoration of Burbank, his effects and memorabilia. The extent of the development of this alternative depends on space available and the direction of use and development of the rest of the grounds. It may be a dominant feature or an incidental part of a broader, more diverse program. There should be some effort made to display the important features of his life, and at least a small collection of personal effects, notes, letters, and tools to support the background effort of other elements of the Farm's use. As indicated earlier, his house should form at least one focus of such a collection and the rehabilitation of the structure should have this objective in mind, either as an initial focus or one to which it could be devoted at a later time.

The critical part of such an undertaking is 1) assigning the responsibility of collection and care of effects, 2) safe and permanent displays, and 3) a long-term commitment for maintenance and preservation. The several historical societies and local historians, such as Pat Feeney, should be consulted and invited to participate. However, a professional historian from the University or State College system should be retained as a consultant if this alternative is contemplated.

PART II - SPECIAL TOPICS

This section develops more fully several topics pertinent to alternative uses of the Farm suggested in Part I. These discussions are tentative procedures and comments providing background and example to possible sources of revenue and activities of consequence to the community at large centered around the rehabilitation of the Burbank Experimental Farm.

1) Therapy and Rehabilitation through Horticulture.

Therapy and rehabilitation through horticulture can be applied to the physically and/or psychologically impaired, disabled, or handicapped. As a rule the total separation of physical and psychological impairments is rarely possible and more often than not the two are closely interrelated and interdependent. The physically disabled may incur psychological impairment from direct brain injury, from rejection syndromes inflicted by society or from attitudes developed from self-imposed emotional reactions. Horticultural media provide at once non-threatening, and (where necessary) expendable material to which patients can react, manipulate, control and even appear to create. Thus a primary objective is first to transfer their thoughts from themselves to plants, then change their own pessimism to the optimism of growth and flowering, which in turn can be related by proper guidance to their improved future. Aside from dexterity and skill development, the culture, propagation, and management of plants can lead to direct communication with the larger community through clubs and work experience, and later to society as a whole.

Clearly, the embarkation on a program for a therapeutic center such as Burbank Farm requires a careful selection of facilities and environment compatible with other uses of the Farm and the groups to be served.

The approach to each type of subject group will need to be adjusted to the kind of impairment characteristic of the group; for instance, the blind cannot achieve results using the same materials and facilities provided for amputees or spastics. Nevertheless appropriate use of visual, audial, odoral and tactile contact with plants is the essence of the therapy for all groups.

Environments in every case must be non-threatening and free of distractions, yet very much alive and horticulturally oriented. This does not necessarily imply buildings, although they may be essential for some programs. Among the various facets of horticultural science that can be exploited are: plant culture, propagation,

landscaping, management, harvesting, preserving, sales of produce, flower arrangement, biology, and aesthetics. It is essential for every group to be deeply involved with tactile contact of soil, plants, and water. It is also essential for each individual to have his own plants, space to keep them, and simple, safe tools consistent with his capabilities and condition. Particularly where psychological problems are involved, continuity of activity through all seasons is prerequisite. In these cases interruption of therapy may lead to irretrievable personal disaster for the patient.

The implementation of this use for the Farm needs to be carried out on two levels: 1) facilities development, and 2) program development. Both require money and time.

Most of the facilities already suggested in Part I of this report could be easily adapted to limited use for purposes of this kind; however, if the program becomes successful separate facilities designed specifically for therapeutic purposes will be needed. The direction of such expanded development should be toward those groups for which there is a demonstrated need and proven utility of a given program. It will be very counterproductive if facilities and program are developed that are not acceptable or useful to those being served. Hence, one or more pilot programs should be undertaken, their results analyzed and evaluated, and specific facilities arranged for their sustained use.

Therapists are trained in the use of horticulture for therapy and rehabilitation in a program offered by Kansas State University and the Menninger Foundation. Further information can be obtained by writing the Menninger Foundation, Box 829, Topeka, Kansas, 66601.

Persons in Sonoma County who are directly involved in mental health and programs for the handicapped should be contacted, acquainted with the potential, and asked for assistance to develop programs and liaison between medical associations, institutions, agencies and the Farm.

Sustained monetary assistance must be developed from several sources interested in serving local groups. Public funds should be contributed by city and county agencies in proportion to the source of the users. Medical associations and service clubs should have a financial input as well as acting as a resource for special facility acquisitions.

2) Development of Fiscal Support

There are several ways that the management can develop at least a portion of the necessary fiscal support for the Farm through a self-sustaining effort. Some of these methods are:

1. Public donations, honoraria, and gifts.
2. Endowments and trusts.
3. Sales of plant materials and produce.
4. Admission and facility use fees.
5. Contraction for special services or facilities.

Each type of resource should be evaluated and a policy developed by the Board of Directors. Clear and concise rules for the use, expenditure of funds, reporting and acknowledgment should be laid down and governed by the City Manager in concert with the City Council and the Board of Directors.

Items 1, 2, and 4 are commonly used techniques at many similar institutions and are more or less self-explanatory. Nevertheless, an important part of fiscal responsibility must be provided by the city, especially in the early stages of development. Later the city must be prepared to underwrite overall fiscal responsibility on a sustained basis and meet the difference between the self-sustaining effort, gifts and actual expenditures. Every ploy should be used, and especially attention should be given to the acquisition of large donations, endowments and trusts where the opportunity presents itself. This may require considerable time and effort of individuals on the Board of Directors, and may possibly involve professional fund raisers where deemed advisable for the acquisition of buildings or improvements. Care should be taken not to develop backlash or apathy by over-zealous or too frequent requests.

Annual Plant Sale

Of considerable potential is the development of an annual or biannual plant sale, and a small local outlet for produce in season. The following discussion is essentially a case history, using Heather Farms in Walnut Creek as a model. Heather Farms is a large multiple use city park for which a garden center was desired by local residents, but funding could not be obtained through city sources. In a period of five years, net plant sales have increased from \$800 to \$12,000 for a two-day sale. A second spring sale initiated this year grossed \$5,000. This feat has been accomplished by a number of very devoted citizens, the help of local garden club members, and very good advice and planning. At least 50% of the material for sale has been raised by garden club members, some stock has been donated by local nurseries, and a small portion has been purchased from wholesale sources. Growing and holding facilities were donated by the City of Walnut Creek, and a lathhouse and irrigation system was built by members.

Heather Farms is a non-profit corporation. Nearly all services and equipment are donated, and the goals are clearly defined. The pattern for this operation was modeled after the example of the Stribling Arboretum in Golden Gate Park, San Francisco. The program in both instances has the support of the local nursery trade, and does not offer direct competition since the sale is only an annual or biannual affair. Prices for sale items are competitive or slightly higher than those offered by retail nurseries. In recent years some items have been offered, such as fruits and nuts, and plant-related crafts and objets d'art. A program for Burbank Farm has several important advantages already built in: 1) a theme and objective, 2) holding and propagating space, 3) an adaptable sales area, 4) an unusual plant source, capitalizing on Burbank's eminence, and 5) a singular need. In order to develop such an institution there are several elements that require attention in sequence:

- 1) Approval of the plan and appointment of a sale committee chairman.
- 2) Formation of a non-profit corporation.
- 3) Securing the interest and assistance of local garden and service clubs.
- 4) Appointment of a sale committee. Such a committee should be directly responsible to the Board of Directors and the Farm Manager. Both those entities should lend direct assistance and personal involvement in appropriate phases of the sale.
- 5) Plant material should be grown or solicited through a sub-chairman or sub-committee.
- 6) Advertizing is a critical element and needs a special sub-committee and a very active chairman.
- 7) A sub-committee to inventory, screen, and price sale materials.
- 8) A sub-committee devoted to physical set-up, marking and arrangement of plants and providing of qualified persons to explain the growing requirements of plants on sale.
- 9) A person, or sub-committee to collect and manage money and be responsible for receipts, records, etc.

Produce Sales

There is an opportunity for the development of a small sales potential for produce and particular plant materials capitalizing on the fact that the material came from Burbank's own material. They can be used as mementos of the man, Farm or city. Produce, on the other hand, must be disposed of and hopefully, will not be wasted. A local sales outlet should be developed and operated by volunteer labor, or the fruit should be donated to charitable organizations.



The large activity area near the front of the Burbank House has sufficient room to accommodate a small sales booth if this alternative is pursued.

Contract Revenue

The fifth alternative funding source is a possible target of opportunity, i.e., the provision of facilities or services under a contractual arrangement to an individual, firm, or agency. This may involve research facilities, educational programs, or wholesale production of specialty plant items. Until the direction and basic plan of the Farm has been decided, the pursuit of this revenue source is not productive, but certainly remains as a potential.



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APPENDIX I

PRELIMINARY LIST OF VARIETIES OF TREES, SHRUBS AND HERBS
TO BE REINSTATED AT THE BURBANK FARM

Trees and shrubs marked by an asterisk (*) are already growing on the premises. Plants marked with a dagger (†) were varieties of unusual importance. This list does not include Burbank material issued after his death, some of which should be added.

Trees

Apple	Gold ridge Winterstein (*?)
Cherry	Black Giana Burbank (†) Honey-Heart Early Honey-Heart Red n-Gold Great Blood heart Patagonian
Fig	Foundling
Nectarine	Gold Yellow
Peach	Opulent
Pear	Berger Test
Plum and Prune	Satsuma (†) Wickson (†) Formosa (†) Beauty (†) Santa Rosa (†) Miracle Abundance (†) Burbank (†) Climax (†) Duarte (†) Eldorado (†) Graviota (†) Golden October (†) Purple leaf hybrid KP 193 Shiro Standard Prune Sugar Prune Vesuvius Corona (*?) Triumph



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Trees (cont.)

Quince	Childs Van Deman Pineapple
Chestnut	California Golden Coe S 8940
Walnut	Paradox (*?) Royal (*) Santa Rosa Soft Shell

Shrubs

Cactus	Bijou Eldorado Royal Superb Ancantha Monterey Santa Rosa Sonoma
Juneberry	Success

Vines

Blackberry	Phenomenal (✓) Primus (✓) Santa Rosa (*?) Iceberg
Grape	Christmas (✓)
Raspberry	Hybrid SS 147 Hybrid SS 6701
Sunberry	Orange

Herbs

Strawberry	Robusta Patagonia Giant
Wheat	Quality Super
Bean	Aztec
Chive.	Imperial New Burbank Pink
Corn	Burbank Aurora



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Herbs (cont.)

Cucumber	Iceland
Pea	Burbank Admiral
Potato	Burbank
Rhubarb	Australian Crimson Winter Giant Crimson Winter
Tomato	Burbank Preserving Santa Rosa
Agapanthus	Cape Colony Lily
Amaranthus	Combustion
Amaryllis	Burbank's Giant Hybrid
Canna	Burbank Tarrytown
Clematis	vars. as may be available
Dahlia	vars. as may be available
Daisy	Shasta Daisy hybrids
Gladiolas.	vars. as may be available
Campus grass	New Dwarf Pampas Grass
Day lily	vars. as may be available
Lilies	vars. as may be available
Poppy	vars. as may be available
Calla lilies	vars. as may be available
Rose	vars. as may be available
Tegudia	vars. as may be available
Verbena	vars. as may be available
Watsonia	vars. as may be available



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APPENDIX II

PLANTS KNOWN TO OCCUR ON THE FARM DESIGNATE

Trees

Nuts

Black Walnut
English Walnut
Chestnut

Juglands hindsii x nigra
Juglands regia x J. hindsii
Castanea dentata

Oaks and Willows

Coast Live Oak
Black Oak
Yellow Willow

Quercus agrifolia
Q. kelloggii
Salix laevigata

Birch and Maple

Cut leaf birch
Norway maple

Betula pendula var. dalecartica
Acer platinoides

Apples and Pome Fruits

Apple
Showy crabapple
Service tree
Persian quince
Chinese quince
Hawthorne
Loquat

Malus sylvestris
Malus floribunda
Sorbus domestica
Cydonia oblonga
Chaenomeles sineusis (x)
Crataegus pinnatifida
Eriobotrya japonica

Prunes and Stone Fruits

Cherry prune
Wild black cherry
Portuguese cherry
Catalina cherry
Common plum
Beach plum

Prunus cerasifera
P. serotina
P. lusitaniča
P. lyonii
P. domestica
P. maritima



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Trees (cont.)

Exotics

Eucalyptus
Catalpa
Locusts
Elm
Persimmon

Eucalyptus glodulus
Catalpa speciosa
Robinia pseudoacacia
Elmus sp.
Diospyros kaki

Shrubs and Vines

Bridal wreath
Bottlebrush
Coyote bush (removed)
Trifoliate orange
Lilac
Mock orange
Scotch broom (removed)
Roses
Blueberry
Spicebush
Blackberry
Boston ivy
Buffalo berry (?)
Privet
Grape
Wisteria

Spiraea prunifolia
Calistemon citrina
Baccharis pillularis
Poncirus trifoliata
Syringa vulgaris
Philadelphus sp.
Cytisus scoparius
Rosa sp.
Vaccinium pallidum
Calyconthus occidentalis
Rubus sp. and Rubus hybrids
Parthenocissus tricuspidata
Shepherdia argentea (?)
Ligusticum sp.
Vitus vinifer

City of Sebastopol

Sonoma County

California, 95472

MELVIN K. DAVIS
CITY MANAGER

PHONE 823-6446

June 27, 1973

MELVIN A. DAVIS, MAYOR
COUNCILMEN
THOMAS R. KLINKER, JR.
HERBERT E. LUKAS
THOMAS F. MILLER
DONALD W. SHATTO

Use Permit

Mr. Lloyd Frimmersdorf
Sebastopol Area Housing Corporation
167 North High Street
Sebastopol

Dear Mr. Frimmersdorf:

This is to confirm that the Sebastopol Planning Commission at their meeting of June 26, 1973, granted Architectural and Site Plan Approval, and granted a Use Permit for an Elderly Housing Project, 150 Units, Bodega Avenue, on AP 60-222-01, with the following conditions:

1. Development shall occur in substantial compliance to site plan and elevations presented to the Commission;
2. Provide widening of Bodega Highway for acceleration and deceleration traffic lanes, including left turn storage lanes. Curb return at entrance as per City standards in place of standard driveway entrance. Old entrance via existing dirt road shall be abandoned. Developer shall, as shown on the attached intersection sketch, provide the following:
 - a. Dedicate necessary right of way to the City;
 - b. Install curb and gutter from point A to point B;
 - c. Install sidewalk from Point B to Point C;
 - d. Install storm drain as per Sonoma County Water Agency standards from Point A to Point D, and
 - e. Provide 14' lanes adjacent to curbs and 12' lanes for remainder;
3. Internal loop road shall be paved in its entirety and shall be suitably striped, marked and signed to clearly indicate permitted traffic movements, subject to final approval by City staff;
4. Sewer and water to be installed in accordance with city standards; All utilities to be underground;
5. All internal storm drainage shall conform to Sonoma County Water Agency standards and discharge shall be by conduit by existing storm drain system;
6. Garbage areas shall be screened on all sides;
7. A minimum of 10 fire hydrants shall be required with final locations subject to staff approval;

8. The provision of 71 parking spaces as shown is approved provided that the Sebastopol Area Housing Corporation submits a letter to the City of Sebastopol agreeing that should additional parking become necessary, the Corporation will still same, the location and number of spaces to be reviewed and approved by the Planning Commission;
9. Complete off-site and on-site improvement plans shall be submitted to and approved by staff prior to issuance of any building permits;
10. Wherever feasible, 3:1 slopes shall be used on cuts and fills for roadways and parking areas;

11. The northwest corner of the property (from the 48" Black Walnut tree northward) shall be set aside as the "Burbank Experimental Farm" and a map precisely delineating this area shall be submitted and approved by staff prior to issuance of any building permits. Within three years a detailed proposal and plan for the preservation and restoration of the farm and house shall be submitted to the City for review and approval. This plan may be developed separately by the Sebastopol Area Housing Corporation or in cooperation with public agencies. In no case shall any private construction be permitted in this area. No trees or shrubs shall be removed until said plan is approved by the Planning Commission.
12. No new uses, development or construction not shown on the plan submitted with this use permit application shall be permitted without further Use Permit review and approval by the City;

13. Approval of the landscaping plan, lighting plan, and maintenance agreement for the landscaping, shall be required prior to issuance of building permits. These submissions shall be made to the City staff for approval; and
14. A parcel map shall be prepared and recorded, in accord with the State Map Act, showing the right of way dedication and the "Burbank Experimental Farm" area reserve.

Yours truly,

William R. Davis

William R. Davis
Secretary to the Planning Commission

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